2. SPMDs should be protected from unnecessary exposure to the atmosphere, since they can accumulate measurable amounts of contaminants from the air. An "air blank" should be collected in the course of any field deployment, as described in Section 3, Step 3.

3. Biofouling can be a significant problem with SPMDs. Triolein-filled SPMDs are especially susceptible, and should be inspected once or twice during the 28-day exposure period and cleaned by wiping with a paper towel as necessary. The PISCES sampler, filled with n-hexane, is less susceptible to biofouling because the hexane permeates the membrane and inhibits biological growths.

4. Diffusive contaminant uptake in aquatic systems is proportional to the passage of water across the membrane surface. When deploying SPMDs at multiple locations, it is important to place them in locations with similar flow regimes.

5. Diffusive uptake is also directly proportional to water temperature, so it is advantageous to deploy the SPMDs at a time of year when the water temperatures are high and more or less constant.

5.0 HEALTH AND SAFETY

Each field deployment, and the associated hazards, are unique. The project-specific Health and Safety Plan should explain all expected hazards and procedures to cope with them. Water safety issues are the most common hazards encountered in SPMD deployments, and normal water safety precautions must always be observed, including wearing life vests, taking care to avoid hypothermia or heat stroke, etc.

Exposure to the hexane in the PISCES samplers should be a minimal hazard, because the volume is so small (approximately 200 mL).

6.0 SELECTED REFERENCES

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